Before the

FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

In the Matter of	)	ET-Docket No. 93-62
Guidelines for Evaluating the Environmental	)	and Report and Order FCC 96-326
Effects of Radiofrequency Radiation	)	

The Secretary
Federal Communications Commission
1919 M Street, N.W. Room 222
Washington, D.C. 20554

To: The Commission

Response to "Notice of Public Information Collections Being Reviewed by the Federal Communications Commission"

These comments are being timely filed by the Ad-Hoc Association of Parties Concerned About the Federal Communications Commission Health and Safety Rules (the "Association") in response to a "Notice of Public Information Collections Being Reviewed by the Federal Communications Commission" ("Collections Notice") published in the Federal Register August 13, 1996, Vol. 61, No. 157 page 422021, requesting comments be submitted by October 15, 1996, and such comments are being directed to Dorothy Conway as specified in the Collections Notice.

Comments are hereby given in response to the following concerns given in the Collections Notice:

(a) Whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information will have practical utility.

Insofar as the specific information to be collected by the Commission is still to be determined, herein are listed information that is needed for the proper performance of the functions of the Commission and how such information will have practical utility.

1. Information item: Antenna specifications including:

(1) maximum effective radiated power per channel requested in the license application,

(2) number of channels,

(3) minimum and maximum distance from ground of antennas and distance from ground for each antenna transmitter

(4) antenna geographic coordinates to the nearest 10 feet (using new satellite technology to specify exact longitude and latitude,

(5) whether transmitters are omnidirectional or directional (if directional use codes provided by the Commission to approximately characterize the vertical and horizontal propagation pattern)

(6) Signal modulation pattern (using codes provided by the Commission)

(7) Frequency bands for receiving and for transmitting signals

(8) Licensee data: Company name, address, phone/fax, contact persons to get further details.

(9) Other parameters as deemed needed based on a representative sampling of sites to be studies to determine if there may be adverse health effects from very low level chronic radio frequency exposure.

Utility: Using above information power density estimates can be computed using Commission database of similar antenna from other operators in the area. By having relatively exact geographic coordinates it is possible for any operator to determine what are the other operators in the local area, output power, and approximate estimates of its propagation. This provides the minimum information to make approximate estimates of total exposure - necessary for determining if Commission exposure criteria are met. If further information is needed this should be added.

While estimates of power density based on the above would supposedly be 'worst case' - since they would be based on the maximum effective radiated power ("ERP") allotted to a carrier, they could still give crude estimates of exposure. In most cases, even a crude over estimate may

find a site in compliance, and therefore not needing to have to provide a detailed environmental assessment.

Moreover, many operators correctly note that making actual measurements on all transmitters not categorically excluded may be very time consuming. To help assure an efficient, non-burdensome, implementation of the Commission's new rules, using worst case approximations based on allowed maximum ERP may provide a good compromise between assuring compliance and avoiding costly time consuming measurement for many transmitters in a short time. On a random sample basis the Commission could verify that the above method is sufficient for implementing the Commission's rules.

Moreover, even if physical measurements were made and over a 24 hour period it is not clear that 'worst case' exposures would be considered. For example, in rainy weather, power density may need to be dramatically increased to assure penetration of the signal through the air. Yet it is unlikely measurements would be made during such adverse weather conditions.

Also, exposures in the homes, schools, or workplaces may include reflections off 90 degree electrically reflective corners (e.g. file cabinets, or metal storage cabinets placed to form a 90 degree corner). Such 90 degree corner reflections can increase power density exposures up to 16 fold or more. Likewise, wearing metal eye-glass frames can also increase exposure to the eye [see the Association petition for reconsideration page 7,8]. Thus, worst case approximations

Moreover, since there is little information of health effects from chronic exposure to low levels of radio frequency irradiation, the above data will provide useful information to the Commission and to the federal health agencies to which the Commission defers for advice on radio frequency health guideline exposure criteria.

Since it would be an unreasonable burden to require detailed measured exposure data for all sites, the Commission should consult with the U.S. Environmental Protection Agency for developing a scheme for making detailed measurements at a **representative sample** of sites with exposures below the Commission's exposure criteria in order to have exposure data to compare with future health data in order to determine if there are health effects associated with exposure and if there are any dose-response relationships.

2. Information item:

"Have schools, hospitals, businesses, and residences within 1000 meters of the proposed facility been provided information about the proposed facility and its potential radio frequency environmental effects according to Commission rules? Yes or No.

Have application responses describing the facility, its environmental impact, and other parts of the application designated as public information by the Commission been made available to the above parties in accordance with Commission rules? Yes or No"
[see Petition for Reconsideration submitted by the Association in this proceeding, page 6,7 for specifics of suggested notification guidelines]

Utility: It is necessary for those who live, attend school, or work near a facility for which an action is proposed to be made aware of the requested action.

(2.1) This is necessary in order to fulfill the intent of 47 CFR Part 1 §1.1307(c) providing for interested persons to allege to the Commission significant environmental effects pursuant to a requested action, otherwise categorically excluded, i.e. certain requests for approval of a new, renewal, or modification license. For without knowledge of a requested action and information on the state of knowledge of environmental effects of radio frequency, persons who have a legitimate interest will remain unaware of the requested action and its potential impact.

(2.2) This is necessary in order to provide for additional sources of input of information needed for an environmental assessment given in §1.1311, and including §1.311(3) "whether construction of the facilities has been a source of controversy on environmental grounds in the local community," and (4) including nature and extent of any unavoidable adverse environmental effects, and any alternative sites or facilities which may have been or might reasonably be considered."

3. Information Item: Will persons be exposed under "occupational/controlled" environmental conditions concerning the facility for which application approval is requested? (Yes or No) If yes, attach documentation which describes and verifies that such "occupational/controlled" exposed persons are 'fully aware and in control of their exposure.'

Are any such exposed persons represented by a bargaining unit? (Yes or No). If yes, then attach a statement certifying that such bargaining unit has been informed at least four weeks prior to submitting this application, of intent to submit, and attach any comments of such unit regarding whether it finds that exposed persons are 'fully aware and in control of their exposure.'

Utility: To fulfill the Commission rules that only persons who are 'fully aware and in control of their exposure' are exposed to 'occupational/controlled' exposure levels, it is necessary to verify that the conditions are met whereby such exposures are permitted. By providing a means for bargaining units to be made aware of and provide input to the Commission, the Commission helps assure it is receiving the necessary input to assure that Commission rules are met that only those 'fully aware and in control of their exposure' are so exposed, thereby helping to assure worker health and safety and the public interest.

(b) The accuracy of the Commission's burden estimate: To notify nearby schools, hospitals, putting a notice by the facility, and notifying the local jurisdiction concerning an application to be submitted to the Commission according to the rules to be set by the Commission should take relatively little time. In many cases just a letter to a school district and local jurisdiction. Likewise notifying employee bargaining units should take little time. The substantive discussions that may occur due to such notifications are important in any case and are in the public interest.

(c) Ways to enhance the quality, utility, and clarity of the information collected

Commission licensees are reporting, *"determining the licensee of nearby facilities will be difficult, and determining their power and frequency will be nearly impossible."* [reported by the Personal Communications Industry Association petition for reconsideration (Sept. 6, 1996) in this

proceeding at page 15, and supported by the response of AT&T (Oct. 8, 1996) at page 5 and 6]. Indeed, this is one of the key reasons that categorical exemptions are requested and why a delay in implementing Commission rules are being requested by many operators.

Therefore, utility of the data can greatly be enhanced, and greatly ease the burden of applicants, and make what is 'difficult' or 'nearly impossible' readily and easily available if collected data is properly entered into a computer database. Then it will be readily accessible by the operators and by the public. Moreover, such a database capability will remove much of the 'burden' some operators perceive in complying with the Commission's present 1% 'trigger' limit, and in complying with the Commission's schedule to implement its rules. Thus, many difficulties appear to be lessened with the increased utility of having the data properly entered into databases with proper interfaces.

Moreover, it appears that the systems needed to overcome the above named difficulties may currently be available for obtaining all Commission licensees within a certain radius of a site at a given latitude and longitude, e.g. Interactive Systems, Inc. ("ISI") for a very modest cost has such a system currently available. ISI states that it, *"is the only FCC authorized provider of interactive access to the most current FCC licensing data."* ISI reports it has no sign-up charges, no monthly fees, access is readily available using most communications software packages, and that all 'hourly' charges are on a per minute basis, with many simple queries of the Commission sites within a certain radius of a location taking only a few minutes, and costing less than $5.00, thus making it a readily available low cost method of determining all facilities near a given location (assuming geographic latitude and longitude are correct - which may currently not be the case and is in need of updating.).

See Exhibit for example of capability of Interactive Systems, Inc. Note, material provided is not intended to promote this particular company, but only to demonstrate there is currently a readily available system (upon updating of latitude and longitude of sites) for identifying all Commission licensees in an area.

[Note: For database results to be meaningful, the geographic latitude and longitude inputs must be very accurate, and is possible now using satellite enhanced geographic location measurement systems. Common carriers can certainly provide these measurements, which are understood to be relatively fast to make, and could be done during a routine maintenance at a facility. The Commission may arrange with common carriers a means whereby for a modest fee they also provide such measurements for amateur radio operators or others who may not have the need to routinely make such measurements, or perhaps the Commission may find other means of obtaining up to date exact geographic locations for its sites.]

(d) Ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology

By collecting sufficient information to allow a database to determine approximate power density estimates for any given location the burden on Commission licensees can be greatly minimized.

While some operators have suggested that a 'site owner' be responsible for monitoring exposure at a site, this may not be realistic or even possible, since transmitters on different properties, owned or leased by different 'site owners' may make comprehensive consideration of all sources of exposure difficult and burdensome without such an on-line database system.

Conversations with Interactive Systems, Inc. suggest that this company or other companies contracting or otherwise coordinating with the Commission and using its databases, may be able to modify current databases and interface software to permit convenient:

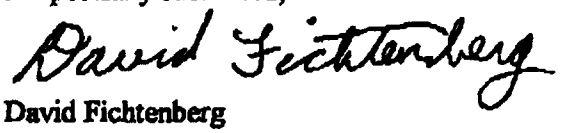
1. Listing of all transmitters within a specified radius of a site, the maximum ERP, and other characteristics needed for determining exposure compliance, and

2. May actually have sufficient information and software to provide exposure estimates using a methodology which the Commission sanctions as authorized estimates which may be used in lieu of on-site measurements, at least for a reasonably large proportion of sites, with other sites

having actual measurements over time to validate the monitoring methodology and indicate any needs for improving the methodology.

The fact that a small insignificant charge may be made for applicants to receive the needed data from a Commission licensed contractor should not be a cause for removing this efficient means of obtaining needed data from serious consideration.

Respectfully submitted,



David Fichtenberg
Spokesperson for the Ad-Hoc Association of Parties
Concerned About the Federal Communications Commission
Health and Safety Rules

Dated: October 15, 1996

David Fichtenberg
Ad-Hoc Association of Parties Concerned About the
Federal Communications Commission Health and Safety Rules
PO Box 7577
Olympia, WA 98507-7577

Submitting one original and fourteen copies to the Secretary, Federal Communications Commission, 1919 M Street, N.W., Room 222, Washington D.C., 20554

Exhibit 1 providing example to demonstrate that FCC databases and interfaces are available for identifying FCC licensees within a given distance from a specified facility, and having capability of interactively providing power, frequency, and other data needed to estimate exposure.

Example from services of Interactive Systems, Inc.

If geographic location in lattitude and longitude were updated in the FCC database to be exact, and perhaps additional transmitter data were input, then exposure estimates may be provided.

13)

FCC DATABASES AVAILABLE

- Tower File
- FAA Airport File Retrieval Using the Antenna Survey System
- Private Radio Microwave
- AM, FM, TV
- Broadcast Auxiliary
- Common Carrier MultiPoint Distribution Service Licenses & Applications (Part 21.900)
- PRB Land Mobile Licenses & Applications, Pending & Granted (Part 90 & Part 95)
- Common Carrier Bureau Land Mobile Licenses, Pending & Granted
- FCC Administrative Tracking Information
- Telephone Interconnect System (Part 68)
- Satellite Earth Station
- Coast and Ground
- Amateur
- Marine

Interactive Systems, Inc.
1601 N. Kent Street, Suite 1103
Arlington, VA 22209

~~Phone (703) 812-0370~~ 703 247-5443 ~~Fax (703) 812-0275~~ (703) 247-5445

Query Option: 0

In What Format Do You Wish to Display/Print The Data?

1 - Detail (standard)
2 - Short version (3 line summary by Frequency)

Please Enter Desired Number: 2

Enter Latitude (Nddmmss): n474600

Enter Longitude (Wdddmmss): w1222000

Please Enter Radius of Circle (NNNN.NN): 25

Do you want to limit your search using a frequency range?
Enter Y or N: y

You can search on frequencies using Megahertz, Gigahertz, or Kilohertz.
eg. M153.95 G.15395 K153950 are all equivalent

The first frequency entered is either the low side of a range
. . . OR the first of one or more frequencies for which you
desire an exact match (up to 50). Carriage return to second (blank)
frequency to enter high side of a range.

Enter frequency: m869
Enter frequency:

Enter high side of frequency range: m890
Do You Wish To Select By Radio Service Code ? (Y/N) : y
PLEASE Enter Radio Service Code XX : cl
PLEASE Enter Radio Service Code XX :

Please validate the parameters you have entered:

Latitude: N474600
Longitude: W1222000
Radius: 25.00
Lower Frequency of Range: M869.0
Higher Frequency of Range: M890.0
Radio Service: CL

Are these values correct? (Y or N): y
Preparing query . . .
Processing query . . .

QUERY DATE: 22-Mar-95

Frequency	Licensee	Callsign	File Number	Exp Dt	Cls	Units	S
Location		St Sv	Lat	Long	Dist	Bearing	
Asamsl	Str-Hgt Hgt-Tip Haat	Power	Erp	Rad-Op	Phone	LastChg	Type
870.03000	INTERSTATE MOBILEPHONE C	KNKA304	00588CLCL	890401	FB	1	G
MONROE	3310 191ST AVENUE SOUT	WA	CL	47-52-38	121-58-30	18.28	65.2
0	0 0	0	0.00	0.00	.0	000000	
870.03000	INTERSTATE MOBILEPHONE C	KNKA304	01876CLCL	941001	FB	1	G

[illegible] AVENUE SOUT WA CL 47-52-38 121-58-30 18.28 65.2
0 0 0 0 0.00 0.00 .0 000000

870.03000 INTERSTATE MOBILEPHONE C KNKA304 01876CLCL 941001 FB 1 G
REDMOND SAMMAMISH 22200 NE 12T WA CL 47-37-14 122-02-40 16.79 126.7
0 0 0 0 0.00 0.00 .0 000000

870.03000 INTERSTATE MOBILEPHONE C KNKA304 01876CLCL 941001 FB 1 G
ISSAQUAH SQUAK MOUNTAIN LOOP FO WA CL 47-30-59 122-03-06 21.69 142.6
0 0 0 0 0.00 0.00 .0 000000

870.03000 INTERSTATE MOBILEPHONE C KNKA304 01876CLCL 941001 FB 1 G
EVERETT LAKE STEVENS P.U.D. WAT WA CL 48-01-29 122-04-40 21.39 33.5
0 0 0 0 0.00 0.00 .0 000000

870.03000 INTERSTATE MOBILEPHONE C KNKA304 01876CLCL 941001 FB 1 G
WOODINVILLE COTTAGE LAKE 17520 AVO WA CL 47-45-25 122-04-47 11.79 93.1
0 0 0 0 0.00 0.00 .0 000000

870.03000 INTERSTATE MOBILEPHONE C KNKA304 01876CLCL 941001 FB 1 G
RENTON 19501 SOUTHEAST 145TH WA CL 47-28-20 122-04-52 23.48 149.8
0 0 0 0 0.00 0.00 .0 000000

870.03000 INTERSTATE MOBILEPHONE C KNKA304 00588CLCL 890401 FB 1 G
RENTON 19501 SOUTH EAST 145TH WA CL 47-28-21 122-04-52 23.46 149.8
0 0 0 0 0.00 0.00 .0 000000

870.03000 INTERSTATE MOBILEPHONE C KNKA304 01876CLCL 941001 FB 1 G
REDMOND REDMOND, 18150 REDMOND WA CL 47-39-58 122-05-49 12.99 122.1
0 0 0 0 0.00 0.00 .0 000000

870.03000 INTERSTATE MOBILEPHONE C KNKA304 01876CLCL 941001 FB 1 G
WOODINVILLE MALTBY 92ND AVENUE SE WA CL 47-49-25 122-06-09 11.40 69.7
0 0 0 0 0.00 0.00 .0 000000

870.03000 INTERSTATE MOBILEPHONE C KNKA304 01876CLCL 941001 FB 1 G
BELLEVUE EASTGATE SE90 2800 156 WA CL 47-35-06 122-07-50 15.69 142.9
0 0 0 0 0.00 0.00 .0 000000

870.03000 INTERSTATE MOBILEPHONE C KNKA304 01876CLCL 941001 FB 1 G
BELLEVUE OVERLAKE GROUP HEALTH H WA CL 47-37-40 122-08-43 12.97 137.5
0 0 0 0 0.00 0.00 .0 000000

870.03000 INTERSTATE MOBILEPHONE C KNKA304 01876CLCL 941001 FB 1 G
RENTON MAY CREEK 11224 138TH A WA CL 47-30-10 122-09-16 20.03 155.3
0 0 0 0 0.00 0.00 .0 000000

870.03000 INTERSTATE MOBILEPHONE C KNKA304 01876CLCL 941001 FB 1 G
WOODINVILLE WOODINVILLE 17713 WOODI WA CL 47-45-26 122-09-27 8.18 94.5
0 0 0 0 0.00 0.00 .0 000000

870.03000 INTERSTATE MOBILEPHONE C KNKA304 01876CLCL 941001 FB 1 G
BELLEVUE LAKE BELLEVUE 13400 NOR WA CL 47-37-43 122-09-30 12.53 139.4
0 0 0 0 0.00 0.00 .0 000000

870.03000 INTERSTATE MOBILEPHONE C KNKA304 01876CLCL 941001 FB 1 G
REDMOND BRIDLE TRAILS, NORTHEA WA CL 47-39-59 122-09-48 10.50 131.1
0 0 0 0 0.00 0.00 .0 000000

870.03000 INTERSTATE MOBILEPHONE C KNKA304 01876CLCL 941001 FB 1 G

No monthly charge no set up charges

Subscribe to the ISI Online Service
The Most Current FCC Data Available

1. Fill In the Following Client Information:

Name _____ Title _____

Company _____

Street _____ Suite _____

City _____ State ____ Zip _____

Phone (___) _____ Fax (___) _____

2. Select the Database Access Method:

- ☐ DIRECT DIAL 1200 Baud @ $36/Hour (Dial Direct to ISI, Incur Long Distance Charges Outside Metro Washington, D.C.)
- ☐ DIRECT DIAL 2400 Baud @ $54/Hour (Dial Direct to ISI, Incur Long Distance Charges Outside Metro Washington, D.C.)
- ☐ DIRECT DIAL 9600 Baud @ $100/Hour (Dial Direct to ISI, Incur Long Distance Charges Outside Metro Washington, D.C.)
- ☐ TOLL FREE 2400 or 1200 Baud @ $60/Hour (800 Service, No Long Distance Charges)
- ☐ TOLL FREE 9600 Baud @ $100/Hour (800 Service, No Long Distance Charges)

All of these are charged on a per minute basis.

3. Complete the Authorization/Use Limitation Agreement:

I assume sole responsibility for all use of the databases and acknowledge that the Federal Communications Commission has sole responsibility for the accuracy of the Databases. I further agree not to resell, or make available to any third party copies of any portion of the databases received from ISI. I may provide third parties with products that include data derived from the Databases, so long as the products have value added, and are provided in other than the media and/or format in which the data was received from ISI.

I agree to the above Use Limitation. Please bill access charges to the following Credit Card:

MC __ Visa __ Acct. No. _____ Exp.Date_____

_____ _____ Date _____

Print Name Signature

☐ **Please Send Account Application so that ISI can bill me directly.**

Most Communications Software packages (eg. Procomm

Online FCC Database Menu

1 - By Callsign
Search for one, or up to 50 Callsigns. Results viewed in Administrative or License format. Pending, Granted, or Both.

2 - By File Number
Search for one, or up to 50 File Numbers. Results viewed in Administrative or License format. Pending, Granted, or Both.

3 - By Frequency and State
Search for one Frequency and one State or nationwide. Licensee and Transmitter data are displayed.

4 - By Latitude/Longitude
Search for all Callsigns of licensees at that Lat/Long. ViewCallsign, Licensee, City, ST, Service Code.

5 - By Licensee Name (Zip)
Search for Licensees within a zip code. Use partial zip or Licensee information. Summary or full Callsign report.

6 - By Latitude/Longitude with Radius (with Frequency, Frequency Range & Radio Service Code
Search using Lat/Long., radius, frequency or range, multiple frequencies, all frequencies, and radio service. View in Standard or "Short"(sorted) format.

7 - Full License/Application By Callsign/File Number
Search for license by Callsign or File Number. Full license displayed.

8 - End Users by SMR Callsign
Search for SMR End Users by entering SMR Callsign. View End User Callsign, File No., Licensee Address, Phone, Radio Service, Status, etc.

9 - By Latitude/Longitude with Radius (& Callsign)
Search for specific Callsigns within a radius of selected Lat/Long.

10 - By Latitude/Longitude with Radius (& Licensee)
Search for specific Licensee within a radius of selected Lat/Long.

11 - By Frequency Advisory Number
Search for Licensee(s) using Coordination Frequency Advisory Number.

20 & 21 - FCC Administrative Tracking Information
Track applications and granted licenses by File Number or Callsign.

30 - Batch Reports
Submit radius and other selected querys to run in background or overnight. Search results written as a file to Directory. Retrieved using Option 31.

31 - SQL Access
Perform "Ad Hoc" querys against the full database using SQL. Create, execute, edit, save searches. Download, display results, refine, store querys.

40 - Part 68 Telephone and Interconnection Information
Submenu: 1 - Ap Code, 2 - Prod Code, 3 - Pub Not Date, 4 - Reg. No.
Search for equipment registrations, modifications, and reregistrations.

45 - Tower File
Search for towers within User selected radius, and tower height AGL.

46 - TowAir
Search for airports within User selected radius. Calculates glide slope, ratio, pass/fail, and brief explanation of slope penetration results.

50 Amateur Database
Submenu: 1 - Callsign, 2 - Licensee and/or Zipcode

Standard Report Formats

Fields in Standard Report

ADMINISTRATIVE DATA:

- Status
- Callsign
- File No.
- Attn. Line
- Licensee
- Licensee Address
- Control Point Contact (Phone No)
- Radio Service
- Issue Date
- Expire Date
- No. Mobiles - Vehicle, Portable, Pagers

TRANSMITTER DATA:

- Transmitter (TX) Latitude
- Transmitter (TX)Longitude
- TX Address (Street, City, County, ST)
- Class of Station
- Frequency
- TX Ant HAAT, Hgt to Tip, Gr. El Asmt
- TX Radius of Operation
- Emissions
- Power Output
- ERP, No. Units
- Distance From Centerpoint
- Direction From Centerpoint (Bearing)

Fields in "Short "Report

- Status
- Callsign
- File No.
- Licensee
- Licensee Address (City, ST)
- Licensee Phone Number
- Radio Service
- Expire Date
- No. Mobiles-Vehicle, Portable, Pager
- TX Latitude/Longitude
- Distance From Centerpoint
- Direction From Centerpoint (Bearing)

Interactive Systems, Inc.

The Company:

Interactive Systems, Inc. (ISI) is the only FCC authorized provider of interactive access to the most current FCC Licensing Data.

ISI is a broad-based data processing company which was founded in 1991 by Donald C. Weymer with the purchase of one of the largest DEC/Vax computer installations in the United States. ISI's primary mission is to provide a full range of timesharing, outsourcing, and disaster recovery services to commercial and federal clients. In September 1992, ISI purchased the assets of ATAS, and acquired the Third Party Public Access Contract with the Federal Communications Commission. ISI has numerous other public and proprietary databases which are accessed by more than four thousand users throughout the United States, Europe, and the Middle East.

Services Available from ISI:

Timesharing	Outsourcing	Disaster Recovery
Facilities Management	List Management	Broadcast Fax
Membership/Fundraising	Laser/Impact Printing	Private Bulletin Boards

Important Phone Numbers:

ISI Main Number:	(703) ~~812-8270~~ 247-5443
ISI Fax Number	(703) 812-8275 247-5445
ISI Tech Support	(703) ~~821~~-5634 ~~(After Business Hours)~~
ISI Customer Service	(703) ~~812-8270~~ 247-5443

Hours of Operation:

The **ISI Data Center** is staffed twenty-four hours per day, Monday - Friday, and 7:30 am to 6:00 pm Saturday and Sunday, excluding Christmas and New Years Day. **Customer Service** hours are 9:00 am to 5:30 pm Monday-Friday.

Database Availability:

The FCC Database is available for access except when the Database is being updated which normally occurs between Midnight and 6:00 am eastern time. Users are notified on the Login Banner of any preventive maintenance, or scheduled hardware/software upgrades which would result in the database being unavailable.

Limitation of Use of Data Provided by ISI:

All data and products provided to clients are subject to the Limitation of Use Agreement signed by the client at the time the data or products are purchased. The Limitation of Use Agreement is printed on Page 22 of this Catalog.

Radio Service Codes

When searching the FCC Database, part of the information received is a two-character code which indicates the licensee's type of Radio Service. While not all Radio Services are contained in the ISI FCC Database, the majority are. We have compiled a list of the Radio Services, and their associated codes which can be found in the Database. The codes are:

BROADCAST SERVICES

BA	Auxiliary Broadcast
BF	FM Broadcast
BT	TV Broadcast

COMMON CARRIER SERVICES

CD	Domestic Pub. Land Mobile
CF	Point to Point Microwave
CG	Domestic Public Air-Ground
CL	Cellular Telecommunications
CM	Multipoint Distribution
CO	Offshore Radiotelephone (ORTS)
CP	International Fixed Public Press
CR	Rural Radio

AMATEUR SERVICES

HA	Amateur

INDUSTRIAL SERVICES

IB	Business
IF	Forest Products
IM	Motion Picture
IP	Petroleum
IS	Special Industrial
IT	Telephone Maintenance
IV	Video Production
IW	Power
IX	Manufacturer
IY	Relay Press

LAND TRANSPORTATION SERVICES

LA	Automobile Emergency
LI	Interurban Passenger
LJ	Interurban Property
LR	Railroad
LU	Urban Passenger
LV	Urban Property
LX	Taxicab

PUBLIC SAFETY SERVICES

PF	Fire
PH	Highway Maintenance
PL	Local Government
PO	Forestry Conservation
PP	Police
PS	Special Emergency

RADIOLOCATION

RS	Radiolocation

800 MHz CONVENTIONAL SYSTEMS

CB	Conventional Business
CF	Conv Public Safety/Spec Emerg
CO	Conv Other Ind/ Land Transport
CP	Conv Public Safety/Special Emerg
CX	Conventional SMR

800 MHz TRUNKED SYSTEMS

YB	Trunked Business
YF	Trunked Public Safety/Spec Emerg
YO	Trunked Other Ind./ Land Transport
YP	Trunked Pub. Safety/Special Emerg
YX	Trunked SMR

220 MHz RADIO SERVICES

QD	Non-Nationwide Data
QM	Non-Nat'wide Pub Safety/Med Aid
QO	Non-Nationwide Other
QT	Non-Nationwide 5 Channel Trunked

900 MHz PRIVATE CARRIER PAGING

GS	Private Carrier Paging

900 MHz SERVICES - PRIVATE RADIO BUREAU

GA	Conv PS/Special Emerg (End User)
GI	Conv Other Ind Land Transport
GR	900MHz Conv Commercial SMR
GU	Conventional Business
YA	Trunked PS/Spec Emerg (End User)
YI	Trunked Other Ind/Land Transport
YS	Trunked SMR
YU	Trunked Business

MARINE SERVICES

MA	*Marine Auxiliary Group*
MC	*Coastal Group*
MK	*Alaska Group*
MR	*Marine Radiolocation Land*
MS	*Ship Group*
MX	*Maritime Mobile Satellite*

PERSONAL RADIO SERVICES

ZA	General Mobile

INTERACTIVE SYSTEMS, INC.
General Information

The Company:

Interactive Systems, Inc. (ISI) acquired ATA Services, I (ATAS) and is the only FCC authorized provider of interacti access to the most current FCC Licensing Data.

ISI is a broad-based data processing company which v founded in 1991 by Donald C. Weymer with the purchase of o of the largest DEC/Vax computer installations in the Uni States. ISI's primary mission is to provide a full range timesharing, outsourcing, and disaster recovery services commercial and federal clients. In September 1992, purchased the assets of ATAS, and acquired the Third Pa Public Access Contract with the Federal Communicati Commission. ISI has numerous other public and proprie databases which are accessed by more than four thousand us throughout the United States, Europe, and the Middle East.

Important Phone Numbers:

ISI Main Number:	(703) ~~813-8270~~ 247-5444	
ISI Fax Number:	(703) ~~813-8275~~ 247-5446	
ISI Tech Support:	(703) 841-3634	(After Business Hours)
ISI Customer Service:	(703) ~~813-8270~~ 247-5443	(9:00am-5:30pm M-F)

Data Center Hours of Operation:

The ISI Data Center is staffed Monday-Friday, 24 hours per Sat/Sun 7:00am-6:00pm excluding Christmas/New Years Day

Database Availability:

The FCC Database is available for access except when Database is being updated which normally occurs betw Midnight and 6:00 AM eastern time. Users are notified on Login Banner of any preventive maintenance, or sched hardware/software upgrades which would result in the datab being unavailable.

Limitation of Use of Data Per Client's Contract:

(1) User assumes sole responsibility for all use of the databases acknowledges that the Federal Communication Commission has responsibility for the accuracy of the Databases.

(2) User further agrees not to resell or make available to any third p copies of any portion of the databases received from ISI. User provide third parties with products that include data derived from databases, so long as the products have value added and are provid other than the media and/or format in which the data was received from ISI.

Exhibit 2: Title page of U.S. Environmental Protection Agency report demonstrating the feasibility of developing estimates of power density exposure.

The Commission (with its contractors) may chose to build on the EPA methodology to develop a Commision certified method of estimating exposure at site using Commission database, Interactive Systems, Inc. or other contractor, and methodology similar to that used by EPA.

Random sampling of sites with actual measurements can validate methodoloty and be the means of improving it.

This demonstrates that by using the Commission database and power density exposure models, the Commission (or in cooperation with licensed contractors) can with much more ease than now anticipated monitor areas for compliance with exposure criteria.

50272-101

REPORT DOCUMENTATION PAGE	1. REPORT NO. EPA 520/6-85-011	2.	3. Recipient's Accession No. PB85 245868/AS
4. Title and Subtitle: An Engineering Assessment of the Potential Impact of Federal Radiation Protection Guidance on the AM, FM, and TV Broadcast Services			5. Report Date: April 1985 6.
7. Author(s): Paul C. Gailey and Richard A. Tell			8. Performing Organization Rept. No.
9. Performing Organization Name and Address: U.S. Environmental Protection Agency Office of Radiation Programs Nonionizing Radiation Branch P.O. Box 18416 Las Vegas, NV 89114			10. Project/Task/Work Unit No. 11. Contract(C) or Grant(G) No. (C) (G)
12. Sponsoring Organization Name and Address: SAME			13. Type of Report & Period Covered 14.

15. Supplementary Notes

16. Abstract (Limit: 200 words)

This report describes an engineering analysis of the potential impact of proposed EPA Federal Radiation Protection guidance for radiofrequency radiation on the broadcast industry. The study was performed by developing computer models of the radiofrequency radiation on the ground near broadcast stations and applying the models to data bases of the stations. The models were developed using theoretical predictions, empirical data and an existing numerical electromagnetic code, and compared with field study data and other prediction techniques to determine their accuracy. Variations of the models incorporating possible mitigation strategies were applied in conjunction with the original models so that the number of effective fixes could also be studied. Descriptions of the models and the results of the study are presented.

17. Document Analysis a. Descriptors

b. Identifiers/Open-Ended Terms

c. COSATI Field/Group

18. Availability Statement	19. Security Class (This Report)	21. No. of Pages
Available from NTIS	20. Security Class (This Page)	22. Price $16.95

(See ANSI-Z39.18) See Instructions on Reverse

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